

REMARKS

Applicant appreciates the time taken by the Examiner to review Applicant's present application. This application has been carefully reviewed in light of the Official Action mailed on April 1, 2008 ("Office Action").

Claims 70-78, 80-84, 86-98 and 286 were pending and rejected. The indication of allowable subject matter in the Office Action of February 18, 2005 has been withdrawn by the Examiner. Claims 70, 91, 97-98, and 286 are amended herein. Claims 287-293 are newly added. Support for the amendments to the claims presented herein can be found in the Specification as originally filed. See e.g., Specification, page 23, lines 17-26, page 28, lines 6-25, and page 29, lines 1-6; Figures 4-7, 10-13, 17, 19-21. No new matter is introduced. Claims 1-69, 79, 85, and 99-285 were previously cancelled. Thus, claims 70-78, 80-84, 86-98 and 286-293 are pending. The Applicant respectfully requests reconsideration and favorable action in this case.

In the Office Action:

- (a) Claims 97 and 98 were rejected under 35 U.S.C. § 112, first paragraph;
- (b) Claims 91-98 were rejected under 35 U.S.C. § 112, second paragraph;
- (c) Claims 70, 71, 74, 78, 86, and 88-90 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,947,966 ("Drewry");
- (d) Claims 70, 77, 80, and 81 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,283,967 ("Troxell");
- (e) Claims 72, 73, 75, and 76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Drewry;
- (f) Claims 82-84 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Troxell;
- (g) Claim 87 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Drewry in view of U.S. Patent No. 2,719,042 ("Espy");
- (h) Claims 91-94 and 286 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,676,664 ("Allard") in view of Drewry; and

(i) Claim 95 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Allard in view of Drewry and further in view of U.S. Patent No. 5,129,900 ("Asher").

Rejections under 35 U.S.C. § 112

Claims 97 and 98 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Examiner stated on page 2 of the Office Action that "[the] specification does not describe a system including, inter alia, first and second [elongated] members and a connector having first and second sections and a fastening system with a collet and a collar, where the length of the connector [may] be adjusted by bending the connector."

Original claim 97 depends from claim 96 and recites "wherein the length of the connector may be adjusted by bending the connector." Original claim 98 depends from claim 97 and recites "wherein a body of the connector includes an indentation to facilitate bending the connector." Original claim 96 depends from claim 91 and recites "wherein the connector has a substantially fixed length." Claim 91, as previously presented, recites:

A bone stabilization system, comprising:

- a first elongated member coupled to bone by a first fixation element;
- a second elongated member positioned adjacent to the first elongated member and coupled to bone by a second fixation element; and
- a connector comprising a first opening configured to accept the first elongated member, wherein the connector is coupled to the first elongated member by a cam system positioned in a cam system opening in the connector, the connector comprising a first section and a second section, wherein a position of the first section is adjustable relative to the second section, and wherein a fastening system inhibits movement of the first section relative to the second section during use, the fastening system comprising a collet and a collar, and wherein the collar is friction locked to the collet to inhibit movement of the first section relative to the second section.

Claims 97 and 98 are amended herein to depend from base claim 70, which, as amended herein, recites:

A connector, comprising:

a body;
a first opening in the body;
a second opening in the body; and
a cam system positioned in a cam system opening in the body,
wherein the cam system is in communication with the first opening,
wherein the cam system comprises an engager that is extendable into
the first opening of the body to engage an elongated member,
wherein the cam system opening comprises a shoulder that inhibits
removal of the cam system from the cam system opening and a cam guide that
limits rotational motion of the cam system within the cam system opening, and
wherein the longitudinal axis of the cam system is angled at an angle
between about 40° and about 90° with respect to the longitudinal axis of the
body.

The Applicant believes that the amendments to claims 97 and 98 presented herein sufficiently overcome this rejection. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 91- 98 were rejected under 35 U.S.C. 112, being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner stated on pages 2-3 of the Office Action that "[with] respect to base claim 91, the first and second elongated members are said to be 'coupled to bone,' where bone is an unpatentable part of the human body essentially claimed as structural part of the invention." Claim 91 is amended herein to remove "bone" from the claim language. Claims 97-98 are amended herein to depend from base claim 70. The Applicant believes that the amendments to claim 91 and claims 97-98 presented herein sufficiently overcome this rejection. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 70-71, 74, 78, 86, and 88-90 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,947,966 ("Drewry"). The rejection is respectfully traversed. Although itself has no force of law, the M.P.E.P. restates the following law: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Thus, to anticipate claims 70-71, 74, 78, 86, and 88-90, Drewry must teach every element of claims 70-71, 74, 78, 86, and 88-90. See M.P.E.P. 2131.

As amended, claim 70 recites:

A connector, comprising:

- a body;
- a first opening in the body;
- a second opening in the body; and
- a cam system positioned in a cam system opening in the body,
 - wherein the cam system is in communication with the first opening,
 - wherein the cam system comprises an engager that is extendable into the first opening of the body to engage an elongated member,
 - wherein the cam system opening comprises a shoulder that inhibits removal of the cam system from the cam system opening and a cam guide that limits rotational motion of the cam system within the cam system opening, and
 - wherein the longitudinal axis of the cam system is angled at an angle between about 40° and about 90° with respect to the longitudinal axis of the body.

Claims 71, 74, 78, 86, and 88-90 depend from claim 70. Drewry describes thru-holes 35 and 44. However, Drewry does not appear to describe, either expressly or inherently, at least the limitations of "wherein the cam system opening comprises a shoulder that inhibits removal of the cam system from the cam system opening and a cam guide that limits rotational motion of the cam system within the cam system opening." Thus, it is believed that claims 70-71, 74, 78, 86, and 88-90 now recite subject matter not reached by Drewry. Having distinguished Drewry under 35 U.S.C. § 102(b), withdrawal of this rejection is respectfully requested.

Claims 70, 77, 80, and 81 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,283,967 ("Troxell"). The rejection is respectfully traversed. It is respectfully noted that multiple references were used to reject claim 70 under 35 U.S.C. § 102. Normally, only one reference should be used in making a rejection under 35 U.S.C. § 102. See M.P.E.P. 2131.01. To anticipate claims 70, 77, 80, and 81, Troxell must teach every element of claims 70, 77, 80, and 81.

Claims 77, 80, and 81 depend from claim 70. Troxell describes a threaded cylindrical first body portion 100. However, Troxell does not appear to describe, either expressly or inherently, at least the limitations of "wherein the cam system opening comprises a shoulder that inhibits removal of the cam system from the cam system opening and a cam guide that limits rotational motion of the cam system within the cam system opening." Thus, it is believed that claims 70, 77, 80, and 81 now recite subject matter not reached by Troxell under 35 U.S.C. § 102(e). Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 72, 73, 75, and 76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Drewry. Claims 82-84 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Troxell. Claim 87 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Drewry in view of U.S. Patent No. 2,719,042 ("Espy"). These rejections are respectfully traversed. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Claims 72-73, 75-76, 82-84, and 87 depend from claim 70. Thus, traversal to the rejection is collectively discussed herein with respect to independent claim 70.

Although itself has no force of law, the M.P.E.P. restates the following law: The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. *KSR*, 550 U.S. at ___, 82 USPQ2d at 1395; *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950). "[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art. See M.P.E.P. 2143.

It is respectfully submitted that not all the claimed elements were known in the prior art and that one skilled in the art could not have combined the elements as claimed by known methods with no change in their respective functions. For example, as submitted above, it is believed that Drewry does not describe "wherein the cam system opening comprises a shoulder that inhibits removal of the cam system from the cam system opening and a cam guide that limits rotational motion of the cam system within the cam system opening" within the context of claim 70. There were no apparent reasons that would have prompted one of ordinary skill in the art to modify Drewry and somehow arrive at an invention as claimed in claims 72, 73, 75, and 76, notwithstanding Drewry's lack of description on limitations as set forth in claim 72, 73, 75, and 76 within the context of claim 70. It is believed that claims 72, 73, 75, and 76 recite

subject matter not reached by Drewry under 35 U.S.C. § 103(a) and therefore should be allowed.

Within the context of claim 70, claim 87 further recites "a drive tool that activates the cam system, and wherein the visual indicator is a position of a handle of a drive tool relative to a position of the elongated member." Espy was replied upon for the disclosure of a conventional drive tool usable with the cam system of Drewry. It is respectfully submitted that Espy cannot cure the aforementioned deficiencies of Drewry, notwithstanding the motivation to modify Drewry with Espy. It is believed that claim 87 recites subject matter not reached by Drewry and Espy under 35 U.S.C. § 103(a) and therefore should be allowed.

Similarly, as submitted above, it is believed that Troxell does not describe "wherein the cam system opening comprises a shoulder that inhibits removal of the cam system from the cam system opening and a cam guide that limits rotational motion of the cam system within the cam system opening" within the context of claim 70. There were no apparent reasons that would have prompted one of ordinary skill in the art to modify Troxell and somehow arrive at embodiments as claimed in claims 82-84, notwithstanding Troxell's lack of description on limitations as set forth in claims 82-84 within the context of claim 70. It is believed that claims 82-84 recite subject matter not reached by Troxell under 35 U.S.C. § 103(a) and therefore should be allowed.

Claims 91-94 and 286 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,676,664 ("Allard") in view of Drewry. The rejection is respectfully traversed. Claims 92-94 depend from claim 91. Claim 286 recites limitations similar to those of claim 91. Thus, traversal to the rejection is collectively discussed herein with respect to independent claim 91.

As amended, claim 91 recites:

A bone stabilization system, comprising:

- a first elongated member coupled to a first fixation element;
- a second elongated member positioned adjacent to the first elongated member and coupled to a second fixation element; and
- a connector comprising:

a first section and a second section connected via a fastening system,
wherein the first section comprises:

a first opening configured to accept the first elongated
member;

a cam system in communication with the first opening;

a cam system opening in the connector, the cam system
opening comprising a shoulder that inhibits removal of the cam
system from the cam system opening and a cam guide that limits
rotational motion of the cam system within the cam system
opening;

wherein a position of the first section is adjustable relative to the second section,
and

wherein the fastening system inhibits movement of the first section relative to the
second section during use, the fastening system comprising a collet and a collar, and
wherein the collar is friction locked to the collet to inhibit movement of the first section
relative to the second section.

As discussed above, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Supra*. In this case, Allard discloses an apparatus for externally reducing and/or fixating a fracture in a bone. See Allard, Abstract. However, Drewry discloses a spinal fixation system for posterior internal fixation of the spine. There were no apparent reasons that would have prompted a person of ordinary skill in the relevant field to combine an external apparatus with an internal spinal fixation system. Further, one skilled in the art could not have combined Allard and Drewry by known methods with no change in their respective functions. As a good faith attempt to forward prosecution, independent claims 91 and 286 are amended herein. It is believed that the combination of Allard and Drewry does not describe, among others, "the cam system opening comprising a shoulder that inhibits removal of the cam system from the cam system opening and a cam guide that limits rotational motion of the cam system within the cam system opening." Accordingly, it is respectfully submitted that claims 91-94 and 286 recite subject matter not reached by Allard and Drewry under 35 U.S.C. § 103(a) and therefore should be allowed.

Claim 95 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Allard in view of Drewry and further in view of U.S. Patent No. 5,129,900 ("Asher"). The rejection is respectfully traversed. Claim 95 depends from claim 91 and recites "wherein the first elongated member and the second elongated member are portions of a unitary, bent and contoured member." In applying Asher, the Examiner stated on page 7 of the Office Action that "Asher et al. teach, at least in figure 2, and in col. 3, lines 7; elongated members (26) that are each a unitary, bent, and contoured member." However, claim 95 recites a unitary, bent and contoured member. In embodiments as claimed in claim 95, the first elongated member and the second elongated member are portions of this unitary, bent and contoured member. See e.g., Specification, Figure 3. Thus, it is respectfully submitted that claim 95 recites subject matter not reached by the combined teachings of Allard, Drewry and Asher under 35 U.S.C. § 103(a) and therefore should be allowed.

In view of the foregoing, withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

Newly Added Claims 287-293

Newly added claim 287-290 depend from base claim 286. Newly added claims 291-293 depend from base claim 70 and recite limitations similar to those of claims 287-289. Support for claims 287-293 can be found in the Specification as originally filed. See e.g., Specification, page 28, line 6, through page 29, line 6; Figures 4-7, 10-13, 17, 19-21. No new matter is introduced.

Claim 287 is directed to embodiments as claimed in claim 286, wherein the first opening has a textured surface. Claim 288 is directed to embodiments as claimed in claim 287, wherein the engager presses the elongated member against the textured surface of the first opening when the engager is fully engaged against the elongated member. Claim 289 is directed to embodiments as claimed in claim 288, wherein the engager is fully engaged against the elongated member when the cam system is rotated about 170°. Claim 290 is directed to embodiments as claimed in claim 286, wherein the cam system fully engages the body to the elongated member when the cam system is rotated between about 10° to about 360°. Claim 291 is directed to embodiments as claimed in claim 70, wherein the first opening has a textured surface. Claims 292 is directed to embodiments as claimed in claim 291, wherein the engager presses the elongated member against the textured surface of the first opening when the engager is fully engaged against the elongated member. Claim 293 is directed to embodiments as claimed in claim 292, wherein the engager is fully engaged against the elongated member when the cam system is rotated about 170°.

It is believed that claims 287-290 recite subject matter not reached by art of record under 35 U.S.C. §§ 102 and 103 and therefore should be allowed.

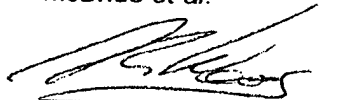
CONCLUSION

The Applicant has now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include any acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, the Applicant respectfully requests full allowance of pending claims 70-78, 80-84, 86-98 and 286-293.

The Examiner is invited to contact the undersigned at the phone number indicated below with any questions or comments, or to otherwise facilitate expeditious and compact prosecution of the application.

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Respectfully submitted,
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